Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1.-11. (Canceled)

12. (Currently Amended) Method for separating a useful layer, initially attached by a sacrificial layer to a layer forming a substrate, the method comprising the following steps in order:

depositing of a mask on at least a predetermined part of the useful layer;

doping through the mask of at least a part of the surface of at least one of the layers in contact with the sacrificial layer, so as to delineate at least one doped zone and at least one non-doped zone of said part of the surface;

at least partial etching of the sacrificial ~~layer,~~layer; and

~~doping, before etching of the sacrificial layer, of at least a part of the surface of at least one of the layers in contact with the sacrificial layer and,~~

~~after etching of the sacrificial layer, a~~ superficial etching ~~phase~~ of said part of the surface so as to increase the roughness of the doped ~~part~~ zone ~~of the~~ of said part of the surface,

~~method comprising deposition, before doping, of a mask on at least a predetermined part of the useful layer so as to delineate at least one doped zone and at least one non-doped zone of said surface,~~ one of said zones forming a stop after the superficial etching ~~phase~~.

13. (Previously Presented) Method according to claim 12, wherein, said surface intrinsically comprising doping elements of a predetermined type, doping is performed by doping elements of the same type, the stop being formed by the non-doped zone.

14. (Previously Presented) Method according to claim 12, wherein, said surface intrinsically comprising doping elements of a predetermined type, doping is performed by doping elements of opposite type, the stop being formed by the doped zone.

15. (Previously Presented) Method according to claim 12, wherein the mask is delineated by photolithography.

16. (Previously Presented) Method according to claim 15, wherein the photolithography has a resolution of about 0.3 micrometers.

17. (Previously Presented) Method according to claim 12, comprising, after doping, an epitaxy step increasing the thickness of the useful layer.

18. (Previously Presented) Method according to claim 12, wherein doping is performed by ion implantation, the doping elements being taken from the group comprising Boron, Phosphorus and Arsenic.

19. (Previously Presented) Method according to claim 12, wherein superficial etching is performed by an aqueous solution containing $K_2Cr_20_7$ and HF.

20. (Previously Presented) Method according to claim 12, wherein the sacrificial layer is completely etched before the superficial etching phase of said surface.

21. (Currently Amended) ~~Method according to claim 12, comprising~~ Method for separating a useful layer, initially attached by a sacrificial layer to a layer forming a substrate, the method comprising the following steps in order:

doping of at least a part of the surface of at least one of the layers in contact with the sacrificial layer;

at least partial etching of the sacrificial layer so as to leave at least one spacer block between the layer forming the substrate and the useful layer,

superficial etching of said surface so as to increase the roughness of the doped part of the surface,

wherein the superficial etching of said surface uses the spacer block as mask, so as to form at least one stop in said surface;

~~after doping and before the superficial etching phase of said surface, partial etching of the sacrificial layer so as to leave at least one spacer block between the layer forming the substrate and the useful layer,~~

~~the superficial etching phase of said surface using the spacer block as mask, so as to form at least one stop in said surface,~~

removal of said spacer ~~block,~~ block; and

an additional superficial etching ~~phase~~ of said surface so as to increase the roughness of the surface of the stop.

22. (Previously Presented) Component comprising a suspended useful layer, attached by fixing means to a substrate, obtained by a method according to claim 12.

23. (New) The method according to claim 21, further comprising depositing of a mask on at least a predetermined part of the useful layer.